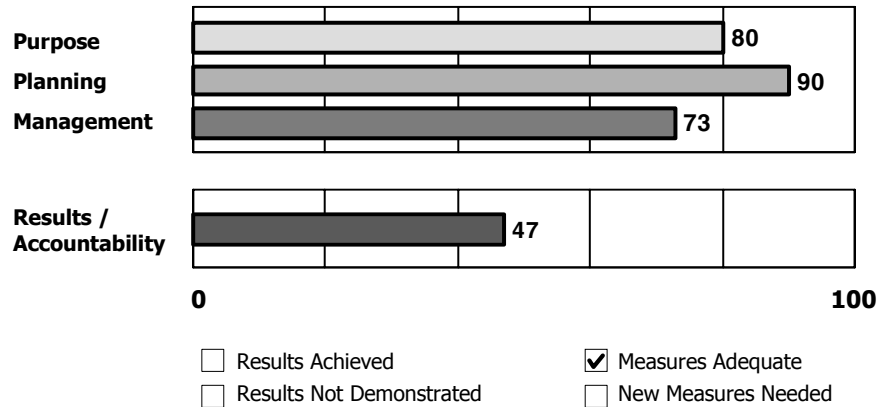


## Program: Shipbuilding

**Agency:** Department of Defense--Military

**Bureau:** Procurement



### Key Performance Measures

Key Performance Measures	Year	Target	Actual
<b>Annual Measure:</b> Percent change in acquisition costs for individual programs from established cost of the program. Results from Virginia Class attack submarine program shown as example; data from DoD's annual Selected Acquisition Reports. The Dec 2001 report represents a two-year period (1999-2001) due to the absence of a Dec 2000 report.	1999	<10%	12%
	2001	<10%	12%
	2002	<10%	
	2003	<10%	
<b>Annual Measure:</b> Percentage of ship construction complete Each ship under construction has a delivery date and construction schedule. At the end of each year, the Program Manager has a goal to have a percentage of the ship construction completed. The information provided is for the first Virginia Class submarine (SSN 774).	1999	22%	24%
	2001	57%	64%
	2002	>85%	
	2003		
<b>Long-term Measure:</b> Number of ships in the Fleet The Navy has a baseline level of ships that it should maintain. For example, the 2001 Quadrennial Defense Review set 55 attack submarines as the baseline force that the Navy should maintain. The information shown shows planned levels for attack submarines.	2000	55	56
	2005	55	54
	2009	55	60
	2012	55	60

## Rating: Adequate

**Program Type:** Capital Assets

### Program Summary:

The shipbuilding program buys new ships and overhauls older ships for the Navy.

The assessment shows that the Navy's shipbuilding program has a clear purpose, which directly relates to the Navy's mission to defend the nation. The shipbuilding program is designed around long-term goals to maintain a specific fleet size and capability. For example, the Navy uses a baseline of 12 aircraft carriers as the minimum number needed to carry out required missions. Because of this goal, aircraft carriers are purchased at levels required to maintain this quantity. Additional findings include:

1. The Navy has specific cost, schedule, and performance goals for each shipbuilding program.
2. The Department of Defense conducts periodic reviews of programs at major milestones of development and uses a structured reporting regime to help monitor the status of ship development and cost, and construction schedule.
3. The shipbuilding program is limited by industrial base, political, and budgetary pressures that have prevented the Navy from building ships at an optimal, efficient rate to provide for the long term.
4. The Navy has experienced cost increases and schedule slips on some ship construction programs.
5. The unique attributes of each ship and the small procurement quantities within the shipbuilding program challenge the Navy from realizing efficiencies that could be achieved program-wide. Optimistic budget assumptions have exacerbated this problem.

In response to these findings the Administration will:

1. Improve the cost estimates for the shipbuilding program or, in some cases, fully budget to cost estimates.
2. Work to ensure that shipbuilding decisions are made with long term fleet size and capability goals in mind.
3. Institute program-wide goals rather than the ship specific goals that are currently used.

### Program Funding Level (in millions of dollars)

<u>2002 Actual</u>	<u>2003 Estimate</u>	<u>2004 Estimate</u>
9,798	9,457	12,161

## OMB Program Assessment Rating Tool (PART)

### Capital Assets & Service Acquisition Programs

Name of Program: Department of Defense, Naval Shipbuilding

#### Section I: Program Purpose & Design (Yes,No)

	Questions	Ans.	Explanation	Evidence/Data	Weighting	Weighted Score
1	Is the program purpose clear?	Yes	The Shipbuilding Program is required to maintain a Navy of a specific fleet size. This program expressly addresses building ships for the Navy.	A navy requires a fleet of ships. The U.S. Constitution Article I, Section 8 authorizes Congress to "provide for the common Defense and general Welfare of the United States" as well as "To provide and maintain a Navy".	20%	0.2
2	Does the program address a specific interest, problem or need?	Yes	Navy ships and the equipment on them provide capabilities that defend the nation. Navy ships are constructed to last between 30-50 years. As ships are phased out of the fleet, the Navy needs to maintain a fleet size that provides enough capability in order to perform its mission.	The active Navy fleet will shrink by six ships from 2002 to 2003. The Navy will decommission two amphibious ships, six destroyers, three frigates, one auxiliary ship, and one aircraft carrier. However, three new guided missile destroyers and one aircraft carrier will enter the fleet for service in 2003.	20%	0.2
3	Is the program designed to have a significant impact in addressing the interest, problem or need?	Yes	New ships deliver capabilities to the Navy in carrying out its defense of the nation. Funding for this program has a direct impact on the number and capability of the ships procured.	For example, the DDG-51 class of destroyers is a multi-mission ship that can defend itself and other ships against submarines, aircraft, and advanced anti-ship systems. Additionally, it can provide support to ground forces through fire support and command and control.	20%	0.2
4	Is the program designed to make a unique contribution in addressing the interest, problem or need (i.e., not needlessly redundant of any other Federal, state, local or private efforts)?	Yes	There are no other federal programs that build ships with specific warfighting capabilities and purposes.	The U.S. Coast Guard is the only agency with a similar program; however, the missions of the Navy and the Coast Guard are separate and distinct from each other.	20%	0.2

5	<i>Is the program optimally designed to address the interest, problem or need?</i>	No	The Navy is challenged to procure the right mix of ships it needs to provide a base force. For example, although the fleet of surface combatants is relatively young, the Navy's budget reflects procurement of DDG-51 destroyers in numbers that require early retirement of Spruance Class destroyers and Perry Class frigates. Additionally, it appears that submarines are being procured in insufficient numbers to maintain a long-term force level of 55 attack submarines. Industrial base, political, and budgetary considerations confound the Navy's ability to achieve an optimally designed shipbuilding program.	DoD 2001 Quadrennial Defense Review shows a baseline force structure of 12 aircraft carriers, 12 amphibious ready groups, 55 attack submarines, and 116 surface combatants. A comparison the baseline to the actual planned force structure provided by the FY 2003 Budget shows disconnects between what is required and what the Navy has/will have. By the time the Navy commissions ships budgeted in FY 2003, it will have more surface combatants and less combat logistics force ships than the required force structure. At the current procurement levels, the Navy will also be challenged to sustain the submarine and amphibious force levels in the long term.	20%	0.0
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<b>Total Section Score</b>	<b>100%</b>	<b>80%</b>
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## Section II: Strategic Planning (Yes,No, N/A)

	Questions	Ans.	Explanation	Evidence/Data	Weighting	Weighted Score
1	<i>Does the program have a limited number of specific, ambitious long-term performance goals that focus on outcomes and meaningfully reflect the purpose of the program?</i>	Yes	The 2001 Quadrennial Defense Review describes a "baseline" force needed to fulfill DoD's strategic plan. This was also outlined in the FY 2002 Annual Defense Report. Additionally, the Navy must monitor the shipbuilding industrial base, which is heavily dependent upon Navy shipbuilding to remain viable.	The 2001 Quadrennial Defense Review states that the Navy shall maintain now and in the future 12 Aircraft Carriers, 12 Amphibious Ready Groups, 55 attack submarines, and 116 surface combatants. This baseline has been determined to deliver sufficient capabilities to the Navy to perform its mission.	15%	0.2
2	<i>Does the program have a limited number of annual performance goals that demonstrate progress toward achieving the long-term goals?</i>	Yes	Each ship under construction has specific annual construction schedule, cost, and performance goals.	The President's Budget justification provides details on estimated costs, contract award dates, and delivery schedules of each ship program. Selected Acquisition Reports show deviations between cost estimates and actual costs.	15%	0.2
3	<i>Do all partners (grantees, sub-grantees, contractors, etc.) support program planning efforts by committing to the annual and/or long-term goals of the program?</i>	N/A	There are no true "partners" due to the unique nature of the shipbuilding program. DoD enters into a contractual relationship with industry, which then produces the number/type of ships the Navy pays them to build.		0%	

4	<i>Does the program collaborate and coordinate effectively with related programs that share similar goals and objectives?</i>	N/A	There are no similar programs that share similar goals and objectives.	0%	
5	<i>Are independent and quality evaluations of sufficient scope conducted on a regular basis or as needed to fill gaps in performance information to support program improvements and evaluate effectiveness?</i>	Yes	By statute and regulation, DoD conducts evaluations of individual ship programs on a regular basis. These evaluations are meant to assess program progress against cost, schedule, and performance criteria.	DoD develops an Acquisition Program Baseline (APB) that sets out the cost, schedule, and performance goals for each ship construction program. Actual costs and schedules are compared to this baseline to measure progress. Two reports, the Annual Selected Acquisition Report and the Quarterly Defense Acquisition Executive Summaries summarize program performance and compare actual results to the baseline.	15% 0.2
6	<i>Is the program budget aligned with the program goals in such a way that the impact of funding, policy, and legislative changes on performance is readily known?</i>	Yes	The DoD budget process formulation allows for sufficient analysis of requirements and costs for acquisition programs including ships. The budget for new ships is arranged in such a way that the impact of funding or policy changes is known.	Budget justification outlines specific cost elements that make up the program. DoD's Planning, Programming, and Budgeting System is a rigorous process that enables the Department to scrutinize the shipbuilding budget plan and assesses funding and policy changes in each ship program. For example, the FY 2003 Appropriations Act decreased the request for the Virginia Class submarine program by \$15 million. Because of this, the Navy will have to take off specific Command, Control, Communications, and Intelligence equipment from the FY 2003 submarine.	15% 0.2

7	<i>Has the program taken meaningful steps to address its strategic planning deficiencies?</i>	Yes	The Navy routinely reviews the Shipbuilding program and works with the Office of the Secretary of Defense to overcome operational challenges posed by any lags in the near-term shipbuilding plan.	Shipbuilding is examined as a whole at several levels, including the Naval Sea Systems Command and the Deputy Assistant Secretary of the Navy for Acquisition of Ship programs. Furthermore, the Planning, Programming, and Budgeting System process clarifies the tradeoffs among different naval communities, such as surface, subsurface, and amphibious concerns. An example of operational changes the Navy recently made to compensate for planning deficiencies is the basing of three submarines on Guam to reduce operational stress on submarines in the Pacific Fleet.	15%	0.2
8 (Cap 1.)	<i>Are acquisition program plans adjusted in response to performance data and changing conditions?</i>	Yes	Through quarterly and other acquisition reviews, DoD has a good sense of where programs are having problems and develops solutions to fix them.	The Navy had experienced schedule and cost problems in its LPD-17 Class Amphibious ship construction program. One of the Navy's responses to this problem was a recently signed Memorandum of Agreement with the two builders of the LPD-17 Class of ships, Bath Iron Works and Ingalls Shipbuilding, that "swaps" ships from one shipyard to another. This was done because the Navy knew that Bath Iron Works was going to face challenges in building the LPD-19 and three other LPDs similar to the Ingalls Shipbuilding experience with the LPD-17 and LPD-18. Therefore, the Navy "swapped" the Bath Iron Works LPD work for additional DDG-51 destroyer work, for which it has years of experience. Furthermore, Ingalls Shipbuilding will build the four LPDs and forgo some DDG-51 work that would have been built at Bath Iron Works. Through this arrangement, the Navy has been able to protect the LPD-17 Class construction program cost and schedule, and maintain the industrial base. This example shows how DoD adjusts acquisition programs to changing performance results.	15%	0.2

9 (Cap 2.) <i>Has the agency/program conducted a recent, meaningful, credible analysis of alternatives that includes trade-offs between cost, schedule and performance goals?</i>	No	Shipbuilding, as a program, has not been the subject of a formal Analysis of Alternatives, which would compare different ship platforms costs and performance to generate an optimal and most economic mix of ships. However, individual programs are subject to such analysis during DoD's acquisition process.	The annual vetting of the overall shipbuilding program through the Planning, Programming, and Budgeting System process provides a limited forum to trade-off capabilities -- which explains the lower weighting than other questions. However, this question does reveal that DoD lacks an in-depth study of tradeoffs within the shipbuilding program.	10%	0.0
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<b>Total Section Score</b>	<b>100%</b>	<b>90%</b>
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### Section III: Program Management (Yes,No, N/A)

	Questions	Ans.	Explanation	Evidence/Data	Weighting	Weighted Score
1	<i>Does the agency regularly collect timely and credible performance information, including information from key program partners, and use it to manage the program and improve performance?</i>	Yes	DoD has an extensive system in place to collect and assess performance information of individual programs. Defense Acquisition Executive Summaries and Selected Acquisition Reports report each platform's progress either quarterly or annually. When put together, these reports provide a comprehensive picture of the shipbuilding program at that time.	For example, the DDG 51 destroyer Selected Acquisition Report (Dated: 31 December 2001) explains the status of the program and progress on ships currently under construction. It identifies any breaches of schedule, cost, performance as compared to the program's current baseline.	13%	0.1
2	<i>Are Federal managers and program partners (grantees, subgrantees, contractors, etc.) held accountable for cost, schedule and performance results?</i>	Yes	Acquisition directives assign accountability to program managers for cost, schedule, and performance. Ship contract requirements are stated in performance terms.	An October 30, 2002 acquisition guidance memorandum addresses internal charters that give authority, responsibility and accountability to individual Program Managers.	12%	0.1
3	<i>Are all funds (Federal and partners') obligated in a timely manner and spent for the intended purpose?</i>	Yes	Funds are obligated and expended in a consistent manner.	Defense Form 1002, provided by the Defense Financing and Accounting Service, shows all obligation data by line item; and the data reveal that the funds have been obligated for shipbuilding activities.	5%	0.1
4	<i>Does the program have incentives and procedures (e.g., competitive sourcing/cost comparisons, IT improvements) to measure and achieve efficiencies and cost effectiveness in program execution?</i>	No	Although specific programs have goals to achieve unit cost efficiencies, Shipbuilding does not have overall efficiency goals. Shipbuilding does not make the most efficient use of the dollars associated with it for a number of reasons stated elsewhere in this assessment (i.e. industrial base).	While, the Navy does look for efficiencies and has had success with individual programs (DDG-51 destroyer contract negotiations, Virginia Class submarine design), it does not look at shipbuilding from a macro or comprehensive perspective. In recognition of this, a lower weighting was given to this question.	5%	0.0

5	<i>Does the agency estimate and budget for the full annual costs of operating the program (including all administrative costs and allocated overhead) so that program performance changes are identified with changes in funding levels?</i>	Yes	DoD budgets for all costs associated with the program.	The shipbuilding budget exhibits provide a breakout of what the funding is supporting. Examples of cost elements include design costs, construction costs, propulsion equipment, electronics equipment.	5%	0.1
6	<i>Does the program use strong financial management practices?</i>	No	DoD as an organization is years away from auditable financial statements.	There are Department-wide internal financial reporting weaknesses.	12%	0.0
7	<i>Has the program taken meaningful steps to address its management deficiencies?</i>	Yes	DoD uses an earned value management system to track program performance. It also has quarterly reporting of a platform's performance, and what the program is doing about fixing problems,	Quarterly Defense Acquisition Executive Summary Reports discuss programmatic weaknesses. As each report is published, the progress of rectifying known deficiencies is reviewed.	12%	0.1
8 (Cap 1.)	<i>Does the program define the required quality, capability, and performance objectives of deliverables?</i>	Yes	In order to ensure the overall capability of the fleet, the DoD acquisition process requires a document that states the required capability and performance measures the capabilities for each platform.	Each platform has a Mission Needs Statement that outlines key performance parameters. Performance characteristics and a mission description are included in the annual Selected Acquisition Report reports.	13%	0.1
9 (Cap 2.)	<i>Has the program established appropriate, credible, cost and schedule goals?</i>	No	DoD does have a process to determine an baseline for each platform that includes schedule, performance, and cost. Selected Acquisition Report documentation captures whether or not the individual platforms are in compliance with this baseline. However, DoD has experienced cost and schedule delays in a number of shipbuilding programs calling into question the credibility of initial goals and estimates.	The Acquisition Program Baselines are revised several times during the life of a platform, which masks how well programs perform relative to initial expectations of cost, schedule and performance. For example, the shipbuilding program has had some significant cost increases on ships already under construction in the last several years, which has diverted funds from the construction of new ships. However, in the last two years, DoD has been budgeting to higher cost estimates--the effect of which will not be visible for another year or so.	10%	0.0
10 (Cap 3.)	<i>Has the program conducted a recent, credible, cost-benefit analysis that shows a net benefit?</i>	N/A	Since this review is at the macro sense, shipbuilding provides a net benefit without question--it provides a needed capability that is required for national defense.			

11 (Cap 4.)	Does the program have a comprehensive strategy for risk management that appropriately shares risk between the government and contractor?	Yes	DoD has risk management plans for all acquisition programs.	Several ship platforms are procured with forward priced-fixed price contracts that transfer the risk to the contractor (CVN-77 aircraft carrier, DDG-51 destroyers, LHD-8 amphibious ship). Additionally, every program has a risk management plan and programs use earned value management data.	13%	0.1
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<b>Total Section Score</b>	<b>100%</b>	<b>73%</b>
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#### Section IV: Program Results (Yes, Large Extent, Small Extent, No)

	Questions	Ans.	Explanation	Evidence/Data	Weighting	Weighted Score
1	Has the program demonstrated adequate progress in achieving its long-term outcome goal(s)?	Yes	The Navy is maintaining its force structure. In some cases, the Navy has made plans to reduce risk by changing operational procedures. The Navy makes a conscious effort to balance risk, force structure, and capabilities.	The Navy's force structure plan, that tracks ship commissionings and decommissionings, shows an adequate fleet size through 2012, although the mix of ships may not be optimal beyond 2012 as more ships built in the 1980's are decommissioned.	20%	0.2
<div> <div>Long-Term Goal I:</div> <div>Target:</div> <div>Actual Progress achieved toward goal:</div> </div> <div>Fund shipbuilding for sufficient numbers to maintain DoD's prescribed force structure. The Navy shall have 12 Aircraft Carriers, 12 Amphibious Ready Groups, 55 attack submarines, and 116 surface combatants. The FY 2004 budget provides for a force structure fairly compliant with the goal through 2012. Beyond 2012 there may be problems maintaining an adequate attack submarine and amphibious ship force.</div>						
2	Does the program (including program partners) achieve its annual performance goals?	Small extent	Ships currently under construction are on schedule for on-time delivery. However, significant prior year bills and cost overruns of five percent or less are commonplace in the shipbuilding program.	The President's Budget shows the estimated delivery date of each ship under construction. Selected Acquisition Report data provides the information to calculate cost deviations from individual Acquisition Program Baselines.	20%	0.1
<div> <div>Annual Goal I:</div> <div>Target:</div> <div>Actual Progress achieved toward goal:</div> </div> <div>Minimize deviations between actual cost and Acquisition Program Baselines in annual Selected Acquisition Reports &lt;10% Mature programs have a cost deviation of approximately 5% (based on the DDG-51 destroyer program). However, construction of the first ship of a class generally average 30% overcost (based on SSN 774 submarine and LPD-17 amphibious ship construction). For example, the SSN 774 experienced a 12% increase over the estimated amount in 1999 and 2001.</div>						
<div> <div>Annual Goal II:</div> <div>Target:</div> <div>Actual Progress achieved toward goal:</div> </div> <div>Each ship under construction has an annual goal to get a certain percentage of construction completed--ensuring an on-time delivery. Meet individual goal for each ship under construction. There are no ships that are currently behind schedule in their construction. For example, the SSN 774 submarine program had a goal of 57% completion by the end of 2001, it more than achieved this goal, with an actual result of 64%.</div>						
3	Does the program demonstrate improved efficiencies and cost effectiveness in achieving program goals each year?	No	Since the Shipbuilding program does not have program-wide efficiency goals, this question can only be "no".		20%	0.0



4	<i>Does the performance of this program compare favorably to other programs with similar purpose and goals?</i>	N/A	This is a unique program that is not comparable to another program.		0%	
5	<i>Do independent and quality evaluations of this program indicate that the program is effective and achieving results?</i>	Large extent	Most shipbuilding programs are not currently experiencing significant delays in achieving major milestones.	At each major milestone of development, an Acquisition Decision Memorandum is published from the Undersecretary of Defense (Acquisition, Technology, and Logistics) that determines whether or not the program has met the required criteria to move on. This decision takes into consideration all of the statutory reporting requirements that the Department and the Program Manager has supplied.	20%	0.1
6 (Cap 1.)	<i>Were program goals achieved within budgeted costs and established schedules?</i>	Small extent	The Navy has had a mixed result in maintaining cost and schedule (see above). In recent years, the shipbuilding program has been using higher cost estimates that should produce less cost breaches.	The LPD-17 amphibious ship program has had both schedule and cost problems, however the program has been reevaluated and is currently on track. The SSN 774 submarine and CVN-76 aircraft carrier are on schedule for on-time delivery. The final ships of the Roll-On/Roll-Off auxiliary ship program were delivered on time and below budget. However, the Prior Year Shipbuilding bill shows that programs suffer from cost increases that were not adequately budgeted for.	20%	0.1
<b>Total Section Score</b>					<b>100%</b>	<b>47%</b>